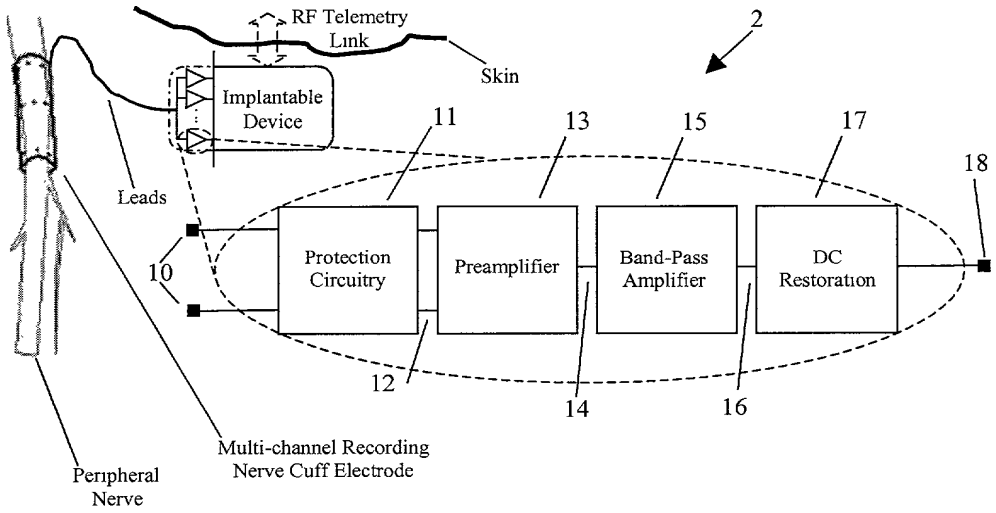
RF Telemetry Link
Skin
2
Implantable Device
11
13
15
17
18
Leads
10
Protection Circuitry
Preamplifier
Band-Pass Amplifier
DC Restoration
12
14
16
Peripheral Nerve
Multi-channel Recording Nerve Cuff Electrode

FIG. 1

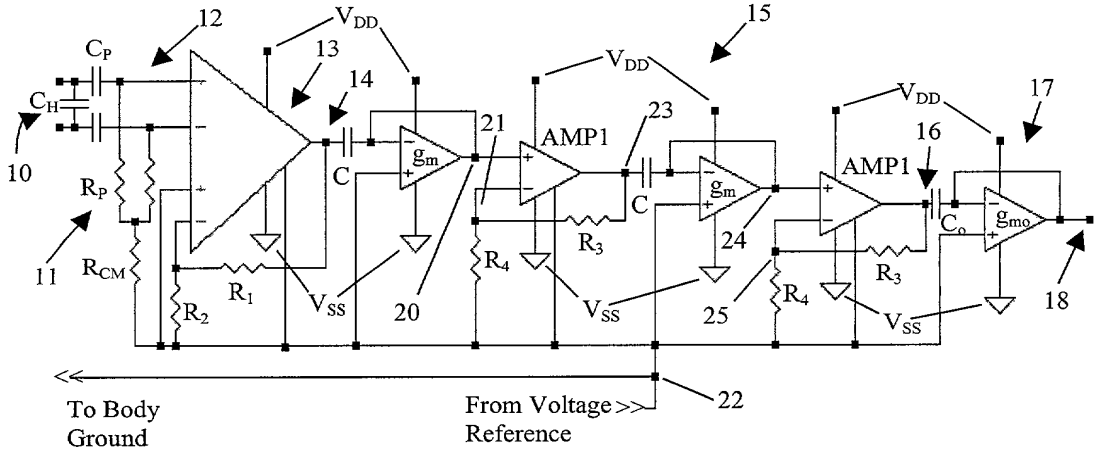
12
V_{DD}
C_P
13
14
C_H
10
R_P
C
g_m
21
AMP1
23
15
V_{DD}
V_{DD}
17
16
AMP1
C_o
g_{mo}
11
R_{CM}
R_1
R_2
V_{SS}
20
R_4
R_3
V_{SS}
24
25
R_4
R_3
V_{SS}
18
22
To Body Ground
From Voltage Reference

FIG. 2a

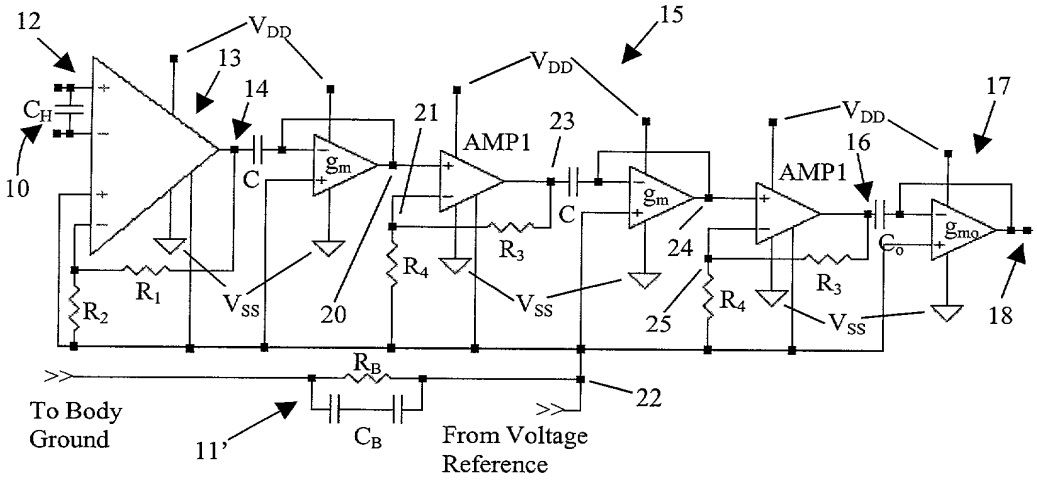
12
V_{DD}
13
14
15
17
C_H
10
C
g_m
21
AMP1
23
16
C_o
g_{mo}
18
R_1
R_2
V_{SS}
20
R_3
R_4
24
25
R_B
22
To Body Ground
11'
C_B
From Voltage Reference

FIG. 2b

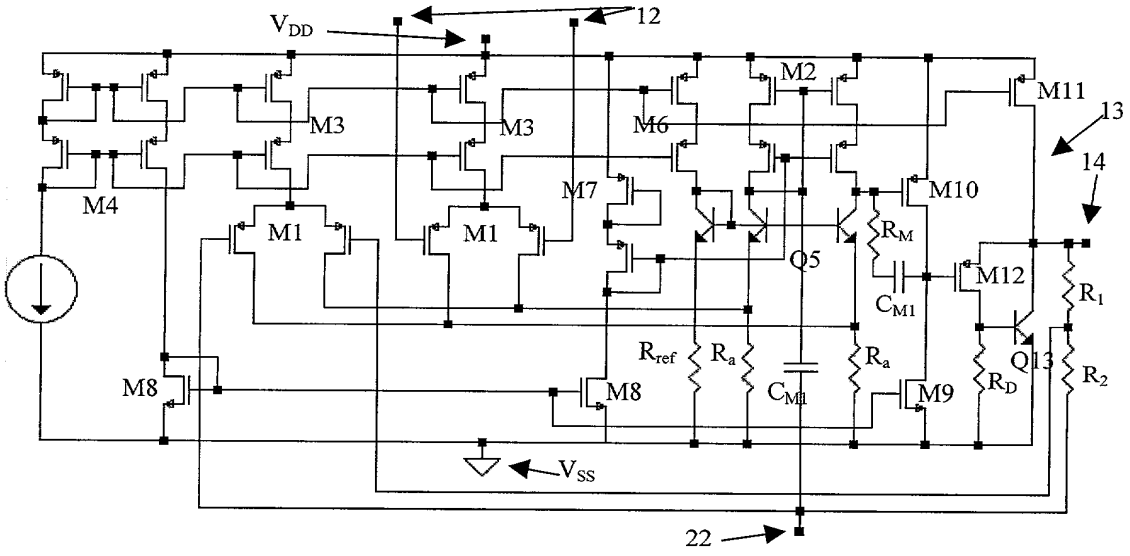
V_{DD}
12
M1
M2
M3
M4
M6
M7
M8
M9
M10
M11
M12
13
14
R_M
C_{M1}
Q5
Q13
R_{ref}
R_a
R_D
R_1
R_2
V_{SS}
22

FIG. 3

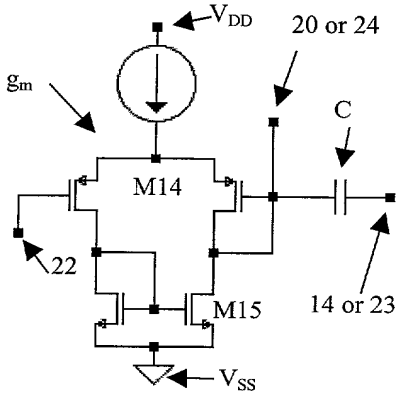
V_{DD}
20 or 24
g_m
C
M14
22
M15
14 or 23
V_{SS}

FIG. 4

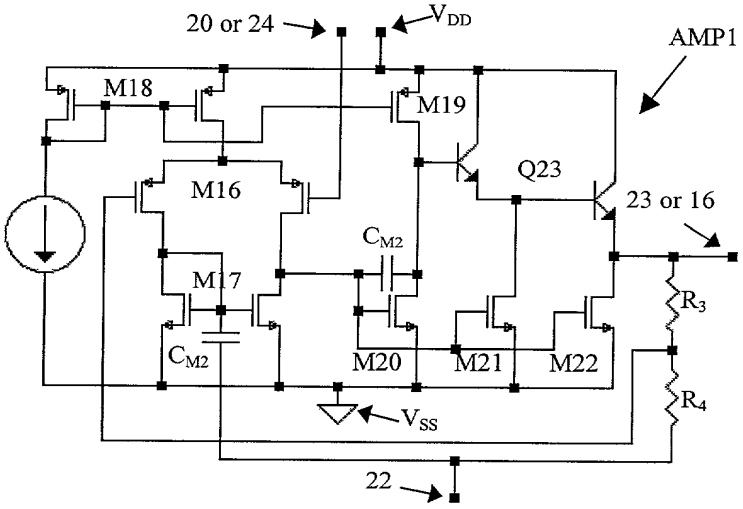
20 or 24
V_{DD}
AMP1
M18
M19
M16
Q23
23 or 16
C_{M2}
M17
R_3
C_{M2}
M20
M21
M22
R_4
V_{SS}
22

FIG. 5

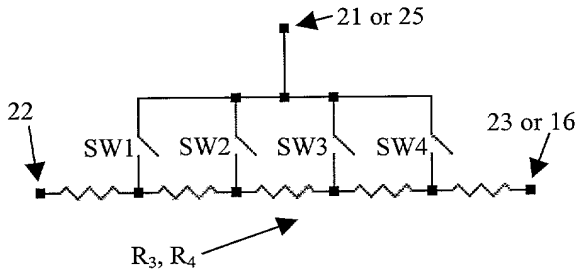
21 or 25
22
SW1
SW2
SW3
SW4
23 or 16
R_3, R_4

FIG. 6

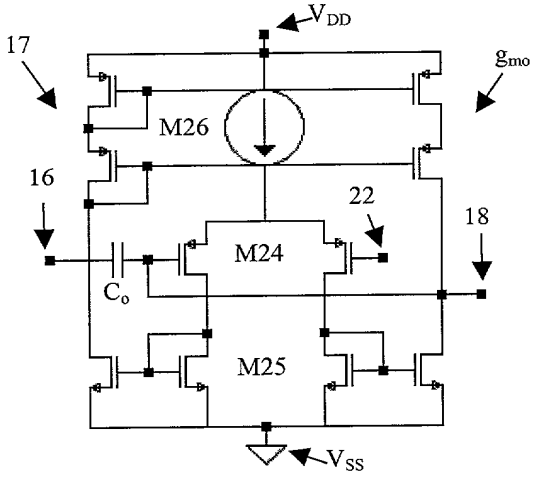
V_{DD}
17
g_{mo}
M26
16
22
18
M24
C_o
M25
V_{SS}

FIG. 7